

SENT VIA E-MAIL/FIRST-CLASS MAIL

March 1, 2013

Don Nottoli Delta Stewardship Council 980 Ninth Street, Suite 1500 Sacramento, California 95815

Re: <u>Department of Water Resources South Delta Temporary Barriers</u>

Dear Mr. Nottoli:

During the February 21, 2013 Delta Stewardship Council ("DSC") meeting, I informed the DSC that the Department of Water Resources ("DWR") recently submitted a status report to the State Water Resources Control Board ("State Water Board") regarding its 2013 implementation of South Delta Temporary Barriers. Currently, the DWR intends to install three agricultural barriers in Old River near Tracy, Middle River, and Grant Line Canal in May. Further and without reason, the DWR informs the State Water Board that it will <u>not</u> install the Head of Old River Barrier ("HORB") this spring; the DWR offers no reason for this decision. This is despite a study from the National Marine Fisheries Service which shows that the HORB doubles the survival rate for juvenile salmonids migrating through the San Joaquin River at a minimum flow rate of 1,500 cfs when compared with the Old River route.

The San Joaquin Tributaries Authority ("SJTA") supports the construction of the HORB and sees no reason that it should not be constructed this year to assist in the migration of juvenile salmon. Further, the State Water Board advocates for a spring unimpaired flow regime. Construction of agricultural barriers would seem to stop or slow the flow of water in the system meant as unimpaired flow for the benefit of migrating fall-run Chinook salmon smolts.

In response to your request for further information, attached are copies of the SJTA correspondence to the State Water Board requesting the installation of the spring HORB, and the DWR South Delta Temporary Barrier Plan sent to the State Water Board.

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Please feel free to contact me with any further questions or concerns.

Very truly yours,

O'LAUGHLIN & PARIS LLP

AUDREY K. PATTERSON

AP/tb

Attachments

cc: San Joaquin Tributaries Authority

Phil Isenberg Randy Fiorini Gloria D. Gray Patrick Johnston Hank Nordhoff

SENT VIA EMAIL

February 27, 2013

Charlie Hoppin, Chairman State Water Resources Control Board 1001 I Street Sacramento, CA 95814

Re: South Delta Temporary Barrier Project

Dear Chairman Hoppin:

The San Joaquin Tributaries Authority ("SJTA") is puzzled by the Department of Water Resource's ("DWR") Temporary Barriers Program for 2013 which states, without reason, that the Head of Old River Barrier ("HORB") will not be constructed in 2013. It is well-documented and understood that the HORB benefits survival of fisheries through the Delta. For instance, the National Marine Fisheries Service ("NMFS") stated:

NMFS concludes that a rock barrier at the head of Old River will increase the overall through-Delta survival of San Joaquin basin steelhead by directing both fish and flow into the mainstem San Joaquin River. The preponderance of empirical data (collected on juvenile Chinook salmon) shows that survival in the mainstem San Joaquin River route is greater than the survival in Old River route[.]¹

In so stating, the NMFS offered numbers which unquestionably illustrate how survival in the mainstem San Joaquin River, at a minimum flow rate of 1,500 cfs, doubles the survival rate for juvenile salmonids when compared with the Old River route. Those numbers are presented in Table 1.

http://swr.nmfs.noaa.gov/pdf/Summary_Expected_benefits_to_Salmonid_survival.pdf

¹ National Marine Fisheries Service. 2012 Summary of the Expected Benefits of Salmonid Survival of a Rock Barrier at the Head of Old River & Preferential Use of the Central Valley Project Export Facility. National Marine Fisheries Service, Southwest Region.

Table 1. Route-specific through-Delta survival rates for juvenile salmonids

	Vernalis Flow	Old River route	Mainstem San Joaquin
	(cfs)		River route
	1,500	9%	18%
Flow	3,000	9%	19%
	6,000	9%	21%

Thus, the HORB would provide protection to migrating salmon by providing guidance through the mainstem San Joaquin River route as opposed to the Old River route.

As the recent VAMP 2011 report points out, survival of juvenile salmon through the Delta from the San Joaquin River was less than 2%. (Draft 2011 VAMP Report, Ch. 5, at 67.) It is unclear, then, why the DWR would choose to not install the HORB in 2013. The DWR gives no explanation or reason regarding why the HORB will not be constructed.

Conversely, the DWR plans on beginning construction of the agricultural barriers on May 5th with plans to be operational by May 15, 2013. How can the State Water Board acquiesce to the operation of agricultural barriers that impede the flow of water through the Delta at a time when fall run Chinook salmon ("FRCS") juvenile salmonids are moving through the system? In low flow years, such as this, it is clear that during April, May and June, exports and in-Delta diversions will greatly exceed San Joaquin River flow.

Further, the State Water Board recently released its unimpaired flow recommendation, calling for a more natural hydrograph to assist fishery populations. With this in mind, it is mystifying how agricultural barriers fit in the State Water Board's recently issued unimpaired flow recommendation. If flow is to be unimpaired, then why would the State Water Board condone constructing dams on Old River, Grant Line and Middle River? There is no evidence or scientifically-based prediction how juvenile salmon that already have a slim chance of moving through the Delta will fare with early operation of the agricultural barriers. Additionally, the SJTA is unaware of "additional studies" conducted by NOAA Fisheries to "address the potential impact of the gates on salmonids predation." (WR 2010-0002, at 7.)

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The SJTA requests that the HORB be installed this year and that the agricultural barriers do not become operational until after the HORB is removed.

Very truly yours,

Men Short

SAN JOAQUIN TRIBUTARIES AUTHORITY

ALLEN SHORT, Executive Director

AS/tb

cc: San Joaquin Tributaries Authority

Frances Spivy-Weber, Vice-Chair

Tam Doduc, Board Member Steven Moore, Board Member Felicia Marcus, Board Member Tom Howard, Executive Director Mark Cowin, Director, DWR

Katherine F. Kelly, Chief, Bay-Delta DWR Office

Maria Rea, Supervisor, NMFS

Memorandum

Date: January 31, 2013

To: Thomas Howard, Executive Director

State Water Resources Control Board

1001 | Street

Sacramento, California 95814

Katherine F. Kelly, Chief

Bay-Delta Office

From: Department of Water Resources

Subject: 2013 Plan for Construction and Operation of the South Delta Temporary Barriers, State

Water Resources Control Board Order WR 2010-0002

In Condition 5 of State Water Resources Control Board (Board) Order WR 2010-0002, the Board modified Board Order WR 2006-0006 to require the Department of Water Resources (DWR), in coordination with the U.S. Bureau of Reclamation, to submit a proposed construction and operation plan for the temporary barriers during the upcoming irrigation season. The proposed plan will be implemented as approved by the Executive Director.

We are submitting for your approval the proposed 2013 plan for the temporary barriers.

Background

The South Delta Temporary Barrier Project (TBP) was initiated in 1991. The project was extended in 1996, 2001, 2006, 2011, and 2012. The environmental permits are in the process of being extended to 2017. The TBP consists of four rock barriers across South Delta channels. In various combinations, these barriers improve water levels and circulation in the South Delta, and San Joaquin River flows for salmon migration. The barriers are located at (1) Middle River near Highway 4, (2) Old River near the Clifton Court Forebay, (3) Grant Line Canal near Tracy Blvd. Bridge, and (4) Old River at the confluence of the San Joaquin River.

Of the four rock barriers, the Head of Old River barrier (HORB) serves as a fish barrier in spring and improves dissolved oxygen levels in the Stockton Deep Water Shipping Channel in fall. The Fall HORB was in place most years during 1963 through 2008, typically between September 15th and November 30th. It has not been installed since then because dissolved oxygen levels have been sufficient for up-migrating salmon. The HORB had also been installed in the spring, generally between April 15th and May 30th since 1992 to provide higher flows in the San Joaquin River and assist out-migrating

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juvenile salmonids. High flows in the San Joaquin River prohibited construction in 1992, 1995, 1998, 1999, 2005, and 2006. In 2008, a court ruling prohibited construction of the spring HORB in order to protect delta smelt. Consequently, in 2009 and 2010, DWR tested a spring non-physical barrier (NPB) in lieu of the physical rock barrier at the same location. In 2011, the NPB could not be constructed due to high water on the San Joaquin River but salmonid survival and predatory fish behavior studies were performed despite the absence of the barrier. In 2012, at the request of the National Marine Fisheries Service (NMFS), the HORB was installed early and with additional culverts. A rock barrier with eight rather than the typical six culverts was installed in March and the barrier was operational by April 1, 2012. All culverts remained fully open from April 1, 2012 to May 31, 2012 and salmonid and predatory fish studies were conducted.

The remaining three barriers serve as agricultural barriers and are typically constructed between April 15th and November 30th of each season. The Old River near Tracy (ORT) barrier has been constructed since 1991 and the Middle River (MR) barrier has been constructed since 1987. Construction of a rock barrier in Grant Line Canal (GLC) began spring 1996. The four rock barriers were not constructed in 1998 due to high San Joaquin River flows. In 2012, the three agricultural barriers were constructed and closed April 1, 2012 to coincide with the April 1, 2012 closure of the HORB.

Proposed 2013 Construction and Operation of the Temporary Barriers

For year 2013, DWR plans to construct and operate the TBP in compliance with all applicable federal and State permits. In spring 2013, the HORB will not be constructed. When the HORB is not constructed and to be consistent with environmental permits, construction of the agricultural barriers may begin on May 1st with closure no sooner than May 15th. DWR plans to start construction of the agricultural barriers on May 5, 2012.

Once constructed, all culvert flap gates will be tied open and the center section of the GLC barrier will not be installed. If the need is demonstrated through modeling and actual water levels, DWR may request approval from Department of Fish and Wildlife (DFW), U.S. Fish and Wildlife Service (USFWS), and NMFS to fully operate the barriers and close the center section of the GLC barrier. If concerns regarding delta smelt survival have passed and approval is granted, full closure of the GLC barrier and full operation of all the agricultural barriers may commence after May 31, 2013. If conditions this year are similar to 2012, this will likely occur early in July.

The culvert flap-gates on each agricultural barrier are tidally operated to improve water levels within the south Delta. Since 2007, during times when water quality was a concern, DWR has modified flap-gate operations of the temporary barriers to help improve water circulation and possibly improve water quality in areas where circulation was poor. For example and depending upon the tide strength, different combinations of opened and closed culvert flap-gates at the ORT barrier may be done to improve circulation down Old River. These actions also benefit fish by reducing stagnant areas

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where algae blooms might occur. These modifications were done and will continue to be done in coordination with South Delta Water Agency (SDWA) and the Delta Water Master.

Starting in 2010, DWR received approval to raise the MR barrier weir elevation one foot. This action can improve circulation by increasing the flow upstream in Middle River and down Grant Line Canal and Old River. In accordance with the USFWS biological opinion, raising the weir cannot occur until any potential negative effect to delta smelt has passed, generally in late June to early July. The Middle River weir was raised on September 1st in 2010, was not raised in 2011 due to high flows and was raised on July 3rd in 2012. DWR plans to raise the Middle River weir in 2013 as soon as delta smelt concerns have passed and the raise is authorized by DFW and USFWS.

The fall HORB is constructed to improve dissolved oxygen conditions in the San Joaquin River and Stockton Deep Water Ship Channel. Based on actual and projected dissolved oxygen conditions, DFW may request DWR construct the fall HORB. Construction usually begins mid-September and the barrier operates through mid-November. During this time, flashboards at the GLC barrier are adjusted and small notches in the MR and the ORT barriers are constructed to allow the passage of adult salmon. In 2012, the Fall HORB was not requested because dissolved oxygen levels were adequate.

Removal of all the rock barriers begins in November. Barriers must be completely removed by November 30th in accordance with environmental permits.

Conservation Strategies and Mitigation Measures

We will continue to comply with all measures and conditions required by regulatory agencies to avoid, minimize, and compensate for the TBP impacts. As specified in the TBP monitoring plan, monitoring is conducted each year the barriers are constructed and an annual monitoring report is prepared summarizing the activities. Monitoring elements include fish monitoring, water quality analysis, salmon smolt survival investigations, barrier effects on State Water Project and Central Valley Project fish entrainment, Swainson's Hawk monitoring, water elevations, water quality sampling, and hydrologic modeling. We will also comply with any new measures and conditions required by regulatory agencies in permits for the TBP 2013-2017 extension.

DWR prepares an annual status report on compliance with environmental permits that is submitted to permitting agencies. This annual status report is in addition to the monitoring report.

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We look forward to receiving your comments and approval of this plan. If you or your staff wishes to discuss this plan further, please contact me at (916) 653-1099 or kkelly@water.ca.gov, or you may also contact Mark Holderman, Chief, South Delta Branch, at (916) 653-7247 or markho@water.ca.gov.

Katherine F. Kelly, Chief

Bay-Delta Office

cc: (see attached list)

PROOF OF SERVICE

I, the undersigned, hereby certify that I am over the age of eighteen (18) years of age and an employee of the State of California Department of Water Resources, 1416 Ninth Street, Sacramento, California 95814.

On January 31, 2013, I served true and correct copies of the attached Department of Water Resources "Plan for Construction and Operation of the South Delta Temporary Barriers" by e-mail to the office of Division of Water Rights of the State Water Resources Control Board on the 14th floor of the California Environmental Protection Agency Building at 1001 I Street in Sacramento. I also served true and correct copies of this document by electronically transmitting the report to the parties listed on the attached Mailing List.

Date: January 31, 2013

Dorlo B. Cofor

Amy L. Aufdemberge
Assistant Regional Solicitor
Room E-1712
2800 Cottage Way
Sacramento, California 95825
istruebing@mp.usbr.gov
Rep: U.S. Bureau of Reclamation

Dante John Nomellini, Esq.
Nomellini, Grilli and McDaniel
P.O. Box 1461
235 East Weber Avenue
Stockton, California 95201
ngmplcs@pacbell.net
Rep: Central Delta Water Agency

Thomas J. Shephard, Sr. P.O. Box 20 Stockton, California 95201 tshephard@neumiller.com Rep: County of San Joaquin

John Herrick, Esq.
South Delta Water Agency
4255 Pacific Avenue, Suite 2
Stockton, California 95207
Jherrlaw@aol.com
Rep: South Delta Water Agency

Michael Jackson
P.O. Box 207
429 W. Main Street
Quincy, California 95971
mjatty@sbcglobal.net
Rep: Calif. Sportfishing Protection
Alliance

Clifford W. Schulz
Kronick, Moskovitz, Tiedemann &
Girard
400 Capitol Mall, Suite 2700
Sacramento, California 95814
cschulz@kmtg.com
Rep: The State Water Contractors

Patrick Porgans
Patrick Porgans and Associates, Inc.
porgansinc@sbcglobal.net

Chandra Ferrari
California Department of Fish and Wildlife
1416 9th Street, Suite 1341
Sacramento, California 95814
cferrari@dfg.ca.gov

Tim O'Laughlin
O'Laughlin and Paris LLP
2580 Sierra Sunrise Terrace,
Suite 210
Chico, California 95928
towater@olaughlinparis.com

Jon D. Rubin Diepenbrock Harrison 400 Capitol Mall, 18th Floor Sacramento, California 95814 jrubin@diepenbrock.com

Daniel Sodergren
City Attorney
City of Tracy
daniel.sodergren@ci.tracy.ca.us

Carl P. A. Nelson
Bold, Polisner, Maddow,
Nelson and Judson
500 Ygnacio Valley Road, Suite 325
Walnut Creek, California 94596-3840
cpanelson@prodigy.net
Rep: Contra Costa Water District

Carolee Krieger, President 808 Romero Canyon Road Santa Barbara, California 93108 Rep: California Water Impact Network

Craig M. Wilson
P.O. Box 100
Sacramento, California 95812
Delta Water Master
Wilson@waterboards.ca.gov

Dustin La Vallee
Office of Delta Watermaster
State Water Resources Control Board
1001 I Street
Sacramento, California 95814
dlavallee@waterboards.ca.gov